

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 12, 22 and 30 as follows:

Claim 1 (currently amended) A method of processing an alarm within a manufacturing process control system including a plurality of field devices each adapted to generate and send alarm messages of various categories, the method comprising the steps of:

receiving a device alarm message from one of the field devices, wherein the device alarm message has a first set of message fields including a first set of device information;

appending a second set of message fields containing a second set of device information associated with the field device to the device alarm message to form an enhanced device alarm message;

selecting a device alarm table based on the second set of device information within the enhanced device alarm message;

mapping the first set of device information within the enhanced device alarm message to the selected device alarm table to identify a set of information fields containing displayable contextual alarm information; and

displaying selected portions of the contextual alarm information at one or more workstations based upon at least one user customizable criterion used to determine which portions of the contextual alarm information are displayed at a particular workstation.

Claim 2 (original) The method of claim 1, wherein the step of receiving the device alarm message from the field device includes the step of receiving a Fieldbus alarm message.

Claim 3 (original) The method of claim 1, wherein the step of receiving the device alarm message from the field device includes the step of receiving a device alarm message including one of a block identification field, a relative identification field and a subcode field.

Claim 4 (original) The method of claim 1, wherein the step of appending the second set of message fields containing the second set of device information to the device alarm message includes the step of appending a message field containing one of manufacturer information, device type information and revision level information.

Claim 5 (original) The method of claim 1, wherein the step of selecting the device alarm table based on the second set of device information within the enhanced device alarm message includes the step of selecting the device alarm table from a plurality of device alarm tables, wherein each of the device alarm tables is associated with a particular set of device information.

Claim 6 (original) The method of claim 1, wherein the step of mapping the first set of device information within the enhanced device alarm message to the device alarm table to identify the set of information fields containing displayable alarm information includes the step of determining whether the first set of device information matches a third set of device information within the device alarm table.

Claim 7 (original) The method of claim 1, wherein the step of mapping the first set of device information within the enhanced device alarm message to the device alarm table to identify the set of information fields containing displayable alarm information includes the step of identifying a set of information fields containing one of corrective action information, alarm message information, alarm type information, alarm description information and alarm parameter information.

Claim 8 (original) The method of claim 1, wherein the step of selecting the device alarm table includes the step of selecting the device alarm table based on a preferred language.

Claim 9 (canceled)

Claim 10 (previously presented) The method of claim 1, wherein the displaying contextual alarm information includes displaying one of an alarm parameter, an alarm description, an alarm type, an alarm message and corrective action information.

Claim 11 (previously presented) The method of claim 10, wherein the displaying contextual alarm information further includes displaying a floating point numeric value from one of the first set of message fields in response to a predetermined character string within one of the set of information fields containing displayable alarm information.

Claim 12 (previously presented) A system for processing an alarm within a manufacturing process control network having a plurality of field devices each adapted to generate and send alarm messages of various categories, the system comprising:

a processor system communicatively coupled to a memory, wherein the processor system is programmed to receive a device alarm message from one of the field devices, wherein the device alarm message has a first set of message fields including a first set of device information, wherein the processor system is further programmed to append a second set of message fields containing a second set of device information associated with the field device to the device alarm message to form an enhanced device alarm message and to select a device alarm table based on the second set of device information within the enhanced device alarm message and wherein the processor system is programmed to map the first set of device information within the enhanced device alarm message to the selected device alarm table to identify a set of information fields containing displayable contextual alarm information, and the processor system is programmed to communicate the at least some selected portions of the contextual alarm information with at least one work station for display at said at least one workstation based upon at least one user customizable criterion used to determine which portions of the contextual alarm information are displayed at said at least one workstation.

Claim 13 (original) The system of claim 12, wherein the device alarm message has a Fieldbus alarm message format.

Claim 14 (original) The system of claim 12, wherein the device alarm message includes one of a block identification field, a relative identification field and a subcode field.

Claim 15 (original) The system of claim 12, wherein the second set of message fields includes one of manufacturer information, device type information and revision level information.

Claim 16 (original) The system of claim 12, wherein the processor system is further programmed to map the first set of device information within the enhanced device alarm message to the device alarm table to identify the set of information fields containing displayable alarm information based on a comparison of the first set of device information to a third set of device information within the device alarm table.

Claim 17 (original) The system of claim 12, wherein the processor system is further programmed to map the first set of device information within the enhanced device alarm message to the device alarm table to identify the set of information fields containing displayable alarm information by identifying a set of information fields containing one of corrective action information, alarm message information, alarm type information, alarm description information and alarm parameter information.

Claim 18 (original) The system of claim 12, wherein the processor system is further programmed to select the device alarm table based on a preferred language.

Claim 19 (previously presented) The system of claim 12, wherein the contextual alarm information includes one or more of an alarm parameter, an alarm description, an alarm type, an alarm message and corrective action information.

Claim 20 (previously presented) The system of claim 19, wherein the contextual alarm information further includes a floating point numeric value from one of the first set of message fields in response to a predetermined character string within one of the set of information fields containing displayable alarm information.

Claim 21 (original) The system of claim 12, wherein the processor system includes a first processor that appends the second set of message fields to the device alarm message and a second processor that maps the first set of device information within the enhanced device alarm message to the selected device alarm table.

Claim 22 (currently amended) A system for processing alarms within a process control network including a plurality of field devices, the system comprising:

a computer readable medium;

a first routine stored on the computer readable medium and adapted to be executed by a processor system that receives a device alarm message from one of the field devices, wherein the device alarm message has a first set of message fields including a first set of device information;

a second routine stored on the computer readable medium and adapted to be executed by the processor system that appends a second set of message fields containing a second set of device information associated with the field device to the device alarm message to form an enhanced device alarm message;

a third routine stored on the computer readable medium and adapted to be executed by the processor system that selects a device alarm table based on the second set of device information within the enhanced device alarm message; and

a fourth routine stored on the computer readable medium and adapted to be executed by the processor system that maps the first set of device information within the enhanced device alarm message to the selected device alarm table to identify a set of information fields containing displayable contextual alarm information; and

~~a fifth routine~~ stored on the computer readable medium and adapted to be executed by the processor system that displays at one or more workstations the

contextual alarm information in the form of one or more of an alarm parameter, an alarm description, an alarm type, an alarm message and corrective action information based upon at least one user customizable criterion used to determine which contextual alarm information is displayed at a particular workstation.

Claim 23 (original) The system of claim 22, wherein the device alarm message has a Fieldbus alarm message format.

Claim 24 (original) The system of claim 22, wherein second routine is further adapted to append a message field containing one of manufacturer information, device type information and revision level information to the device alarm message.

Claim 25 (original) The system of claim 22, wherein the third routine is further adapted to select the device alarm table based on a preferred language.

Claim 26 (original) The system of claim 22, wherein the fourth routine is further adapted to determine whether the first set of device information matches a third set of device information within the device alarm table.

Claim 27 (canceled)

Claim 28 (original) The system of claim 22, wherein the fifth routine is further adapted to display a floating point numeric value from one of the first set of message fields in response to a predetermined character string within one of the set of information fields containing displayable alarm information.

Claim 29 (original) The system of claim 22, wherein the computer readable medium includes first and second memories and wherein the second routine is stored on the first memory of the computer readable medium and the fourth routine is stored on the second memory of the computer readable medium.

Claim 30 (currently amended) A system for processing a device alarm within a process control network having a plurality of field devices each adapted to generate and send alarm messages of various categories, the system comprising:

a processor system communicatively coupled to a memory, wherein the processor system is programmed to receive a device alarm message from one of the field devices, wherein the device alarm message has a first set of device information stored within the field device, and wherein the processor system is further programmed to append a second set of device information associated with the field device to the device alarm message to form an extended device alarm message and to use the first set of device information within the extended device alarm message to identify and display a set of displayable contextual alarm information on one or more workstations based upon at least one user customizable criterion used to determine which portions of the contextual information are displayed at a particular workstation.

Claim 31 (original) The system of claim 30, wherein the device alarm message has a Fieldbus alarm message format.

Claim 32 (original) The system of claim 30, wherein the second set of device information includes one of manufacturer information, device type information and revision level information.

Claim 33 (previously presented) The system of claim 30, wherein the processor system is further programmed to use the first set of device information within the extended device alarm message to identify the set of displayable contextual alarm information based on a comparison of the first set of device information to a third set of device information.

Claim 34 (previously presented) The system of claim 30, wherein the processor system is further programmed to use the first set of device information within the extended device alarm message to identify the set of displayable contextual alarm information from a set of information fields containing one of corrective action information, alarm message information, alarm type information, alarm description information and alarm parameter information.

Claim 35 (previously presented) The system of claim 30, wherein the processor system is further programmed to display the displayable contextual alarm information in the form of one of an alarm parameter, an alarm description, an alarm type, an alarm message and corrective action information.

Claim 36 (previously presented) The system of claim 35, wherein the processor system is further programmed to display the displayable contextual alarm information in the form of a floating point numeric value from the first set of device information in response to a predetermined character string.

Claim 37 (original) The system of claim 36, wherein the predetermined character string is "%V."

Claim 38 (original) The system of claim 30, wherein the processor system includes a first processor that appends the second set of device information to the device alarm message and a second processor that uses the first set of device information to identify the set of displayable alarm information.